

## Occupational Health and Safety

*Occupational health and safety is a complex issue in Maine and the nation, encompassing many public health issues as they relate to the workplace and worker. A tremendous variety of workplace exposures is possible, from toxic chemicals and infectious agents to noise and physical trauma. A broad range of health conditions may result from workplace exposures, from immediate injury to chronic illness to death.*

*Our ability to understand the adverse effects of workplace exposures on workers' health is sometimes complicated by the large number of non-workplace exposures and underlying disease conditions that are experienced by both workers and non-workers in society.<sup>1</sup>*

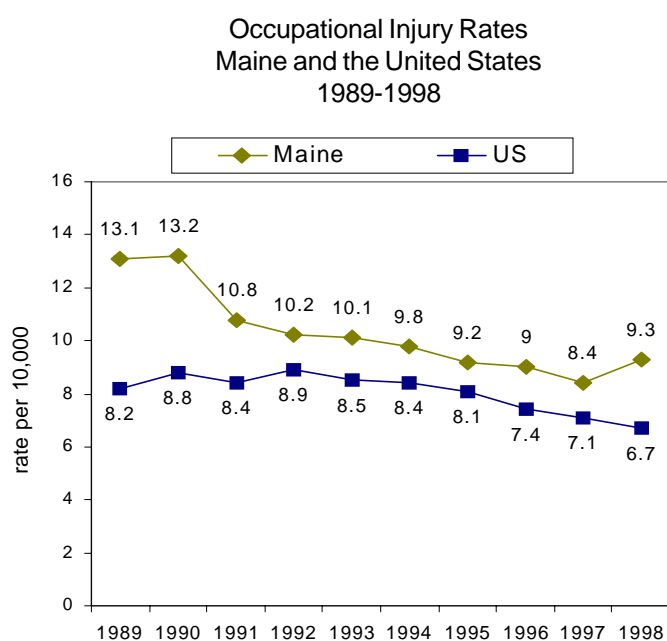
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## Healthy Maine 2000 Goal

### Reduce Morbidity and Mortality Among Maine's Citizens From Work-Related Injuries and Illnesses

#### Overview

Occupational health and safety is a major public health issue in Maine, partly due to our relatively hazardous industry mix. However, according to data from the Maine Department of Labor, Maine's combined occupational injury and illness rate has consistently exceeded that of the United States as a whole, even after adjusting for Maine's more hazardous industry mix.<sup>2</sup>



Source: State of Maine, Department of Labor

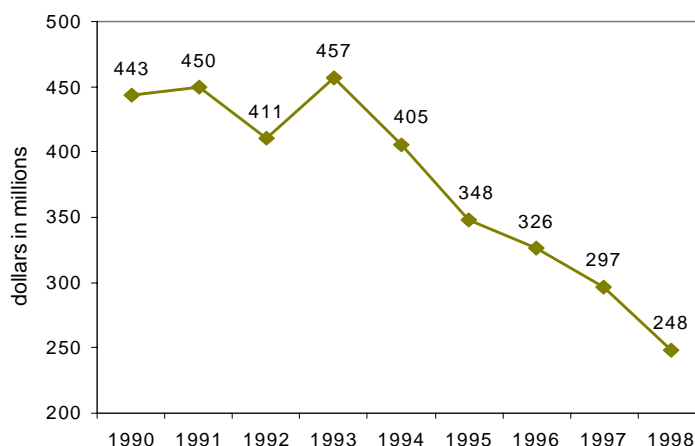
There have been improvements over the last decade as Maine's overall rates of occupational injuries have declined, even though they continue to exceed national rates. The impact of occupational injuries is great: they are not only disruptive to the worker, but they usually disrupt an entire family's well-being.

#### Continued and Emerging Issues

Maine has experienced significant changes in its economic and workplace mix in recent years that have impacted occupational health. In the 1950's, goods-producing jobs and industries (largely manufacturing and construction) represented half of Maine jobs. Currently, only 15% of Maine's workers are employed in these jobs, and this number is continuing to diminish.<sup>3</sup> By contrast, growth in service-related industries (trade, health, education, etc.) have accounted for the greatest increase in jobs in Maine, and the majority of workers are now in these jobs.<sup>4</sup> These changes in Maine's industries appear to have accounted for some of the changes in occupational health issues, such as the decline in our occupational injury rates.

The cost of work-related injuries and illnesses has a significant impact on Maine's businesses and the State's economic climate. Historically, Maine's workers' compensation premiums have been among the highest in the nation. However, this changed dramatically after 1992, with the passage of legisla-

Maine Workers' Compensation Premiums  
by Year 1990-1998



Source: National Institute for Occupational Safety and Health (NIOSH)

tion reforming workers' compensation. This law helped to move the State toward an employer-owned insurance fund which gave employers more control over managing claims and safety programs.

Since 1972, the incidence of lost workdays in Maine has also exceeded that in the U.S. (lost workdays include days away from work and days of restricted work activity).<sup>5</sup> For most of the 1980's, Maine's rates increased while those in the U.S. remained steady. While Maine incidence rates have steadily declined since 1989, Maine's rate in 1998 still exceeded the U.S. rate by over 50%.<sup>6</sup> Early recognition of potential risks and disorders as well as an overall management strategy to address these risks and disorders are paramount to minimizing the impact on workers and workplaces.

Repeated trauma disorders (RTDs) account for a growing proportion of work-related illnesses in Maine and the U.S. In 1998, RTDs accounted for 85% of all work-related illnesses in Maine.<sup>7</sup> These conditions, which are due to repeated motion, vibration or pressure, include carpal tunnel syndrome, tendonitis, ganglionitis, synovitis, tenosynovitis, bursitis, Raynaud's phenomena, epicondylitis, and noise-induced hearing loss. A concerted effort to decrease the incidence of repeated trauma disorders in Maine can result in enormous savings in human suffering as well as in economic cost to businesses.

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Another challenge faced by Maine is its rural nature. In many areas of the State, training and education programs that enhance workplace safety are not easily accessible and health care providers with training in occupational health are not available. The existing resources for addressing occupational health and safety in Maine are often scattered and associated with the larger population centers.

### **Surveillance and Evaluation**

The primary responsibility for monitoring workplace safety, setting standards, and investigating occupational injuries and illnesses in Maine lies with the Federal Occupational Safety and Health Administration (OSHA) and the Maine Department of Labor (DOL). Both OSHA and DOL are also responsible for the enforcement of occupational health and safety regulations. The two agencies are distinct in that OSHA enforces within the private sector and focuses on worksite safety, while DOL enforces within the public sector and focuses on workforce safety. In addition, the Maine Department of Labor's Bureau of Labor Standards produces several reports which compile much of the information available on work-related injuries and illnesses in Maine.

The Bureau of Health is responsible for carrying out the requirements of the Occupational Disease Reporting Law. This law mandates that the Bureau of Health maintains an occupational disease reporting system by receiving reports on nine occupational diseases and all agricultural injuries and illnesses. The Bureau is also required to analyze data to identify risk factors associated with occupational disease, develop strategies to prevent or reduce these risk factors, and train health care providers in the recognition and management of selected occupational diseases. Unfortunately, the federal grant to the Bureau to carry out these mandates expired in 2000.

Reliable data is essential for monitoring the occurrence of work-related injury and illness as well as the effectiveness of occupational health and safety initiatives. Maine's current surveillance system still faces challenges in order to provide reliable and accurate data. For instance, many of Maine's workers are employed in situations that fall outside of the current reporting systems. Injuries and illnesses occurring among many of Maine's self-employed, part-time, agricultural, and small business workers may not be measured by existing data sources. In addition, current databases, such as workers' compensation claim data, are not designed to calculate true incidence rates of occupational conditions in Maine. Often influenced by many factors unrelated to health, they only provide estimates of some events. Occupational-related illnesses often occur long after exposure, making identifying workplace causation difficult. Even work-related fatalities are believed to be under-reported.<sup>8</sup>

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### Current Initiatives

New prevention-oriented initiatives have been implemented to address a number of challenges impacting occupational health in Maine. For instance, the Maine Department of Labor in 2000 instituted a program called "Safety Works," which offers expert advice and hands-on help. "Safety Works" brings comprehensive, leading-edge workplace safety and health services at no cost to employers.

In addition, OSHA's Maine Top 200 Program has been established to assist businesses in evaluating their worksites for hazards and making available some resources to institute innovative ergonomic strategies.

A number of Maine's educational and health institutions have started addressing occupational health in new ways over the last decade. For instance, several educational institutions in Maine such as the Maine Technical Colleges, the University of Maine, and Husson College, are modifying or considering modifying their curricula to provide needed training on occupational health and safety issues. These educational programs are bringing closer to Maine's business and health care community the skills they need to meet the challenges ahead. In addition, a number of health care institutions have developed occupational health clinics to meet the needs of local industries.

While some of the factors behind the recent improvements in Maine's injury and illness rates are unknown, the general consensus is that the above efforts are having a

positive effect. Nevertheless, while overall trends are in the right direction, there is still a long way to go before reaching Maine's goals for preventing injury and illness in the workplace.

### ***Future Objectives***

A sustained commitment to occupational safety and health is therefore needed to improve the situation in the future. Occupational injuries and illnesses are among the most preventable of conditions because in most instances the causes are known. Heightened awareness and the reduction of hazardous exposures can reduce the effects of work-related health problems on workers, their families, and their employers.

A concerted effort is necessary to address the myriad of issues that are contributing to this problem in Maine. By providing the needed resources and support to health care providers, businesses, and workers, we can go a long way towards decreasing the health-related disruptions being experienced by Maine's workers and their employers. Decreasing these adverse health outcomes and their related financial hardships will decrease the loss of skilled labor to Maine's employers, make Maine business and industry more competitive, promote a healthier work force, and ultimately make Maine a healthier place to live, work, and do business.

## Healthy Maine 2000 Objectives

### Objectives Established to Reduce Morbidity and Mortality Among Maine's Citizens From Work-Related Injuries and Illnesses

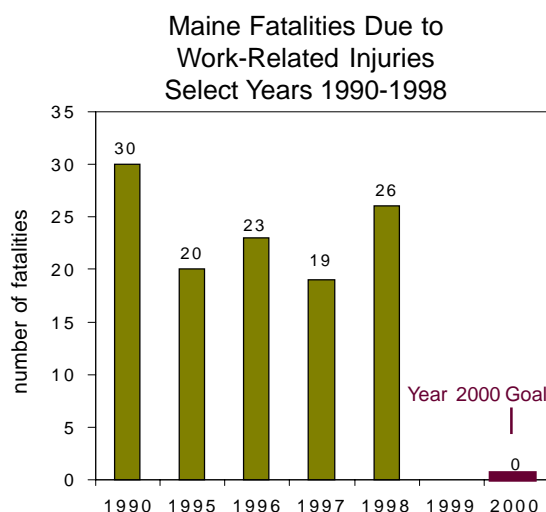
#### Health Status Objective

*Reduce deaths due to work-related injuries to no more than 0 per year.*

**Maine 1990 Baseline Data: 30**

**Most Recent Data: 1998, 26**

This data shows that there has been a decline in the number of workplace fatalities in Maine from 30 in 1990 to 26 in 1998<sup>3</sup>; however, 26 fatalities are an increase from the previous three years. One reason for the increase may be that the 1998 data includes self-employed people, employees in lobstering, fishing and farming industries (agricultural), which are among the top three hazardous occupations and have not been included in previous years due to the difficulty in data verification.



Source: State of Maine, Department of Labor, Annual Report, *Fatal Occupational Injuries*, September, 1998

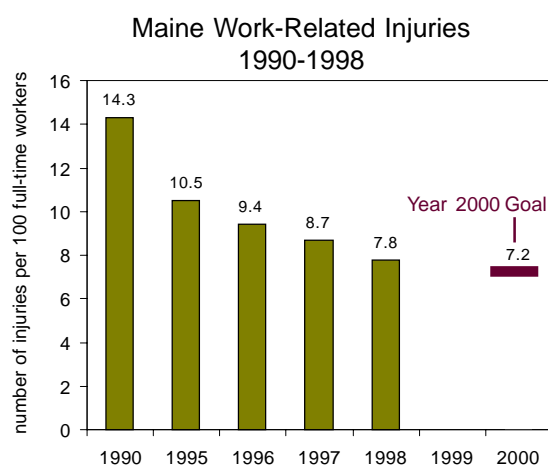
#### Health Status Objective

*Reduce work-related injuries to no more than 7.2 cases per 100 full-time workers per year in the private sector.*

**Maine 1990 Baseline Data: 14.3**

**Most Recent Data: 1998, 7.8**

Since 1990 the number of work-related injuries has steadily decreased to 7.8 cases per 100 full-time workers in 1998<sup>2</sup>. Although the goal of 7.2 cases per 100 full time employees has not been reached, the data might suggest that if the current trend continues to decrease the goal might be reached soon.



Source: State of Maine, Department of Labor, *Character of Work-Related Injuries and Illnesses in Maine*, January, 1999

## Healthy Maine 2000 Objectives

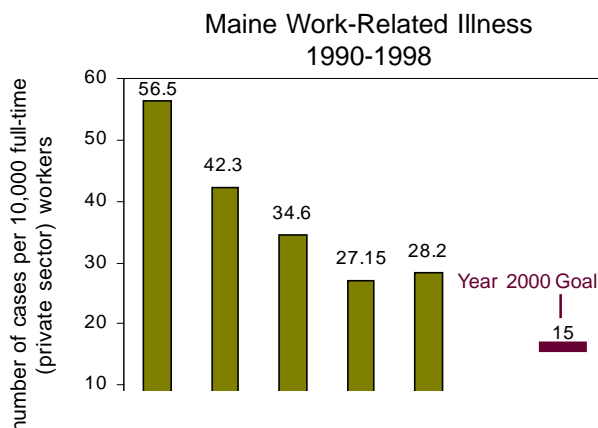
### Objectives Established to Reduce Morbidity and Mortality Among Maine's Citizens From Work-Related Injuries and Illnesses

#### Health Status Objective

**Reduce work-related illness (excluding disorders associated with repeated trauma) to no more than 15 per 10,000 full-time workers per year in the private sector.**

**Maine 1990 Baseline Data: 56.5**  
**Most Recent Data: 1998, 28.2**

Work-related illnesses (excluding disorders associated with repeated trauma) decreased from 56.5 per 10,000 full time workers in 1990 to 28.2 per 10,000 full time workers in 1998<sup>2</sup>. Skin disorders or diseases such as burns were the most common disorder in this category in 1998 (37.8%). Dust diseases of the lungs showed the largest percentage of change increasing by 144.9%. This warrants monitoring to see if a trend develops in any particular industry.



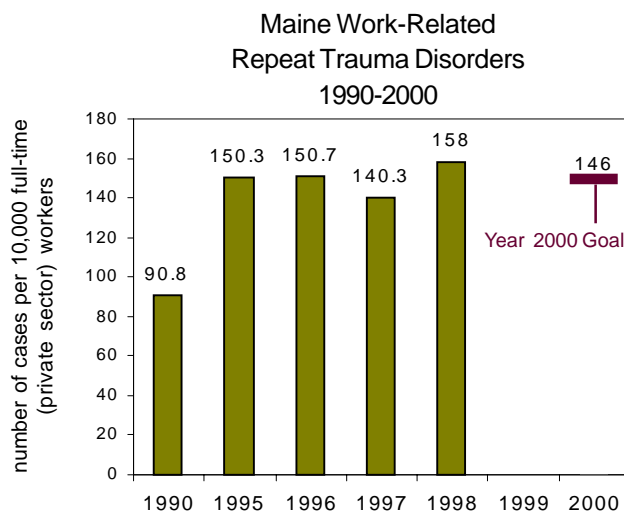
Source: State of Maine, Department of Labor, Character of Work-Related Injuries and Illnesses in Maine, January, 1999

#### Health Status Objective

**Contain the rise in incidence of work-related repeated trauma disorders (RTD's) to no more than 146 cases per 10,000 full-time workers per year in the private sector.**

**Maine 1990 Baseline Data: 90.8**  
**Most Recent Data: 1998, 158**

Repeated trauma disorders (RTD's) increased in 1998 to 158 cases per 10,000 workers<sup>2</sup>. We did not reach the Year 2000 goal of containing RTD's to 146 cases per year. Manufacturing in Maine continued to experience the highest incidence rates of illness and may account for the increase in RTD due to the amount of physical exertion and repetitive tasks involved in the manufacturing processes.



Source: State of Maine, Department of Labor, Bureau of Labor Statistics, Occupational Injury and Illnesses in Maine, January, 1999



## Healthy Maine 2000 Objectives

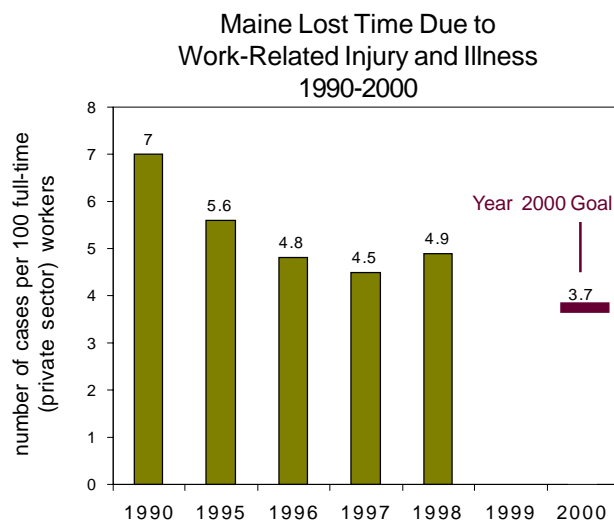
**Objectives Established to Reduce Morbidity and Mortality Among Maine's Citizens From Work-Related Injuries and Illnesses**

### Health Status Objective

**Reduce work-related injuries and illnesses resulting in lost time from work to no more than 3.7 cases per 100 full-time workers per year.**

**Maine 1990 Baseline Data: 7**  
**Most Recent Data: 1998, 4.9**

The number of cases resulting in lost time due to work-related injury or illness has decreased from 7 cases per 100 full time workers in 1990 to 4.9 in 1998<sup>2</sup>. This decrease may be due to less severe injuries happening and/or that there may be more restricted activity encouraged in return-to-work programs than there were in previous years.



Source: State of Maine, Department of Labor, Bureau of Labor Statistics, *Occupational Injury and Illnesses in Maine*, January, 1999

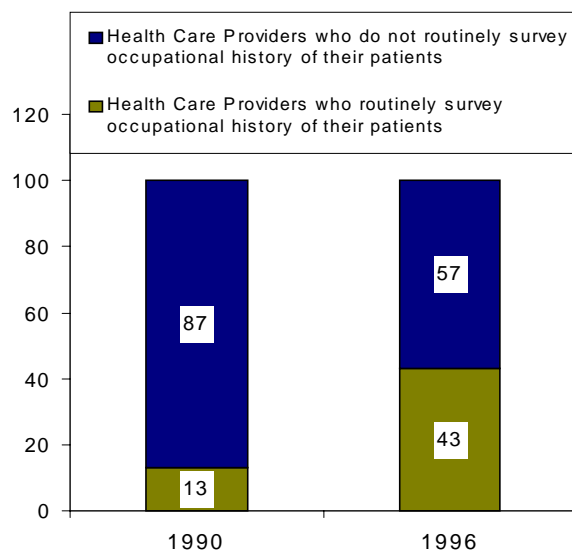
### Public Awareness Objective

**Increase to 75% the number of health care providers who routinely survey occupational history as a part of the evaluation of their patients.**

**Maine 1990 Baseline Data: 13%**  
**Most Recent Data: 1996, 42.8%**

According to a 1996 survey of physicians and physician extenders in Maine, 42.8% of them do an occupational history as part of the evaluation of their patients<sup>9</sup>. This is higher than the 13% reported in 1990. There has not been another survey done since the 1996 survey and plans are in process to repeat the survey in 2001.

**Proportion of Health Care Providers Who Routinely Survey Occupational History 1990 & 1996**



Source: Maine Department of Human Services, Bureau of Health, Occupational Health and Safety, Program Data



## References

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